

Notice of Allowability

Application No.

10/071,853^{*}

Examiner

Manav Seth

Applicant(s)

WAKAMOTO ET AL.

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09/08/2005.
2. ☒ The allowed claim(s) is/are 1-18.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>11012005</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 08, 2005 has been entered.

Response to Amendment

2. Applicant's amendment filed on September 08, 2005 has been considered and entered in full.

3. Applicant's arguments with respect to respective amended claims in the amendment filed September 08, 2005 have been considered and are persuasive. Therefore rejections on the respective claims are withdrawn.

Examiner's Amendment

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

Art Unit: 2625

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with applicant's attorney of record, Mr. George Hartnell, registration no. 42639, on 10/27/2005, at 3:30 p.m., Examiner's amendment in the claims:

Claims

5. The following changes to the claims have been approved by the examiner and agreed upon by applicant:

(a) Replace **Claim 10** limitation "A program used for controlling image data in an imaging system" recited in lines 1-2 of page 6 of the amendment filed, by, -- **A program embodied in a computer readable medium used for controlling image data in an imaging system**--.

(b) Replace **Claim 15** limitation "code that modifies a value regarding a distance between the lens position and a light receiving surface of the image device based on a distortion in perspective transformed obtained by capturing an image of a squared inspection drawing" recited in lines 16-18 of page 9 of the amendment filed, by, -- **code that modifies a value regarding a distance between the lens position and a light receiving surface of the image device based on a distortion in perspective transformed obtained by capturing an image of a squared inspection drawing, until the value regarding the distance**

Art Unit: 2625

between the lens position and the light-receiving surface satisfies requirements for central projection onto the light-receiving surface --.

Allowable Subject Matter

Reasons of Allowance:

6. Claims 1-18 are allowed.

The following is an examiner's statement of reasons of allowance:

Both the instant invention and the closest prior art Nayar, U.S. Patent No. 6,118,474, are directed to a method and system of correcting a image captured from the curved surface of the reflecting mirror. The instant invention further recites the limitation "for correcting distortion in the captured image based on a relationship between a value F regarding a distance between a lens position adapted for the coordinate transformation and a light receiving surface of the imaging device that does not satisfy requirements for central projection onto the light receiving surface and a value F_0 regarding a distance between a lens position and a light-receiving surface of the imaging device **that satisfies requirements for central projection onto the light-receiving surface**" in claims 1 and 10 which is not taught by the prior art of record.

The prior art of record does not teach the limitation "modifying a value regarding a distance between the lens position and a light receiving surface of the image device based on a distortion in perspective transformed obtained by capturing an image of a squared inspection drawing, **until the value regarding the distance between the lens position**

Art Unit: 2625

and the light-receiving surface satisfies requirements for central projection onto the light-receiving surface” as recited in claims 11 and 15.

The instant invention is directed to a method of correcting a image captured from the curved surface of the reflecting mirror. The closest prior art (Nayar, U.S. Patent No. 6,118,474) does not teach of an image recognition section where the captured image is compared to the **central projection image**. The limitation “a third step for comparing the perspective transformed image data stored in the output buffer memory to expected image data obtained when a captured image is a central projection image by using the image recognition section” as recited in claims 12, 16 and 17 is not disclosed or suggested by the prior art of record.

The prior art of record does not teach the limitation “wherein the correction section corrects distortion when a perspective transformed image obtained by capturing an image of a prescribed inspection drawing is not determined to be distorted” as recited in claim 18.

Therefore claims 1-18 are allowed. All other claims depending on claims 1-18 are allowable at least by dependency on claims 1-18.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Art Unit: 2625

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manav Seth whose telephone number is (571) 272-7456. The examiner can normally be reached on Monday to Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Manav Seth
Art Unit 2625
November 02, 2005


KANISHK PATEL
PRIMARY EXAMINER